BRIEF DESCRIPTION OF THE FIGURES

[0018] FIG. 1 illustrates a live node as it might appear in a skip list in accordance with an embodiment of the present invention.

[0019] FIG. 2 illustrates an empty skip list in accordance with an embodiment of the present invention.

[0020] FIG. 3 illustrates an exemplary skip list populated with five visible nodes in accordance with an embodiment of the present invention.

[0021] FIG. 4A illustrates the node deletion process in accordance with an embodiment of the present invention.

[0022] FIG. 4B illustrates an alternative marking process that replaces the next pointer with a pointer to a special delete type node in accordance with an embodiment of the present invention.

[0023] FIG. 5 illustrates the life cycle of a next pointer for a node in a skip list in accordance with an embodiment of the present invention.

[0024] FIG. 6A illustrates operations that take place during the node insertion process in accordance with an embodiment of the present invention.

[0025] FIG. 6B illustrates operations involving higher-level next pointers for the node insertion process in accordance with an embodiment of the present invention.

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DETAILED DESCRIPTION

[0026] The following description is presented to enable any person skilled in the art to make and use the invention, and is provided in the context of a particular application and its requirements. Various modifications to the disclosed embodiments will be readily apparent to those skilled in the art, and the general principles defined herein may be applied to other embodiments and applications without departing from the spirit and scope of the present invention. Thus, the